Statement of Basis of the Federal Operating Permit

ONEOK Hydrocarbon Southwest, LLC

Site Name: Mont Belvieu Fractionator
Physical Location: 9900 FM 1942
Nearest City: Mont Belvieu
County: Chambers

Permit Number: O107
Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 211112
NAICS Name: Natural Gas Liquid Extraction

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: February 27, 2018

Operating Permit
Basis of Determination

Permit Area Process Description
A demethanized mix of natural gas enters the plant via pipelines and is fractionated into five products: ethane, propane, isobutane, normal butane and natural gasoline. The mix is first treated for the removal of H_2S and CO_2 in two amine contactors. The rich amine from the contactors is fed to the Amine Unit. The flash off and the vent from the regeneration unit are routed to heaters H-1, H-2, and H-3.

The treated feed is then sent to one of two deethanizers (large and small). The deethanizers separate ethane as an overhead product and C3+ as a bottoms product. Water is removed from the ethane in two glycol dehydration (dehy) units (TEG-1,2). The dry ethane exits the facility via pipeline and the C3+ stream is routed to the depropanizer for further fractionation.

The bottoms product from both deethanizers is sent to the depropanizer. The separated propane is an overhead product delivered to storage in four high-pressure bullet tanks and later delivered via pipeline. The C4+ bottoms stream is routed to the debutanizer for further fractionation.

The depropanizer bottoms is sent to the debutanizer and separated into a C4 cut as an overhead product and natural gasoline (a C5+ stream, pentanes and heavier hydrocarbons) as a bottoms product. The natural gasoline is treated for sulfur removal using air, caustic, and a catalyst in the MINALK Unit and is then delivered to storage in bullet tanks for delivery via pipeline.

The butanes are treated for sulfur by converting the sulfur compounds into disulfide oil and then are removed. The butanes are then sent to the Deisobutanizer (DIB) to separate the iso-butane and normal butane products which are then delivered to bullet tank storage for delivery via their respective pipelines.

All heat is supplied by three natural gas fired heaters that heat medium oil which is then routed throughout the facility and back to a hot oil tank. These units comprise the Hot Oil System.

Waste gases are collected throughout the plant and routed to the flare header, a closed-vent system. Rather than sending all waste gases to the flare, some of the vapors are routed to a Flue Gas Recovery Unit (FGRU). The FGRU is composed of two electric compressors which recover vapors and either route them to the heaters for use as fuel or to the flare (FL-1).

FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX

Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the

event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting: The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions: The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary: The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to

inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement: The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References: All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan: A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements: This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list: This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there

is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

The applicant opted to comply with the more stringent 20% opacity standard under 30 TAC § 111.111(a)(1)(B) for all stationary vents that are subject to the 30% opacity standard under 30 TAC § 111.111(a)(1)(A).

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents is listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	No

Regulatory Program	Applicability (Yes/No)
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the “Permit Shield” attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.

21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of

requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
EG-2	30 TAC Chapter 117, Subchapter B	117-ENG2	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Natural gas
EG-2	40 CFR Part 60, Subpart JJJJ	60JJJJ-ENG1	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification after June 12, 2006. Manufactured Date = Date of manufacture is on or after January 1, 2009. Test Cell = The SI ICE is not being tested at an engine test cell/stand. Certified = Purchased a certified SI ICE. Exemption = The SI ICE is not exempt. Operation = Operating and maintaining the certified SI ICE and control device according to manufacturer's written instructions. Temp Replacement = The SI ICE is not acting as a temporary replacement. Certified Modification = Purchased, or otherwise own/operate, a modified/reconstructed SI ICE that is not certified. Horsepower = Maximum engine power greater than 25 HP and less than or equal to 100 HP. Fuel = SI ICE that uses natural gas. Service = SI ICE is an emergency engine. Optional Compliance = Choosing to purchase an engine certified according to 40 CFR Part 1048 and install and configure the engine according to manufacturer's specifications. Commencing = SI ICE that is commencing new construction.
EG-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-ENG2	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP less than 100 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.
EG-3	30 TAC Chapter 117, Subchapter B	117-ENG2	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Natural gas
EG-3	40 CFR Part 60, Subpart JJJJ	60JJJJ-ENG2	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification after June 12, 2006. Manufactured Date = Date of manufacture is on or after January 1, 2009 to December 31, 2010. Test Cell = The SI ICE is not being tested at an engine test cell/stand. Certified = Purchased a certified SI ICE. Exemption = The SI ICE is not exempt. Operation = Operating and maintaining the certified SI ICE and control device according to manufacturer's

Unit ID	Regulation	Index Number	Basis of Determination*
			written instructions. Temp Replacement = The SI ICE is not acting as a temporary replacement. Certified Modification = Purchased, or otherwise own/operate, a modified/reconstructed SI ICE that is not certified. Horsepower = Maximum engine power greater than or equal to 130 HP and less than 500 HP. Fuel = SI ICE that uses natural gas. Service = SI ICE is an emergency engine. Optional Compliance = Choosing to purchase an engine certified according to 40 CFR Part 1048 and install and configure the engine according to manufacturer's specifications. Commencing = SI ICE that is commencing new construction.
EG-3	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-ENG3	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.
EG-4	30 TAC Chapter 117, Subchapter B	117-ENG2	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Natural gas
EG-4	40 CFR Part 60, Subpart JJJJ	60JJJJ-ENG2	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification after June 12, 2006. Manufactured Date = Date of manufacture is on or after January 1, 2009 to December 31, 2010. Test Cell = The SI ICE is not being tested at an engine test cell/stand. Certified = Purchased a certified SI ICE. Exemption = The SI ICE is not exempt. Operation = Operating and maintaining the certified SI ICE and control device according to manufacturer's written instructions. Temp Replacement = The SI ICE is not acting as a temporary replacement. Certified Modification = Purchased, or otherwise own/operate, a modified/reconstructed SI ICE that is not certified. Horsepower = Maximum engine power greater than or equal to 130 HP and less than 500 HP. Fuel = SI ICE that uses natural gas. Service = SI ICE is an emergency engine. Optional Compliance = Choosing to purchase an engine certified according to 40 CFR Part 1048 and install and configure the engine according to manufacturer's specifications. Commencing = SI ICE that is commencing new construction.
EG-4	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-ENG2	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2.

Unit ID	Regulation	Index Number	Basis of Determination*
			Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.
FW-2	30 TAC Chapter 117, Subchapter B	117-ENG1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel
FW-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-ENG1	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = 4 stroke spark ignited rich burn engine
SV-1A	30 TAC Chapter 115, Storage of VOCs	115TK-00051	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
SV-1A	40 CFR Part 60, Subpart Ka	60Ka-00445	Product Stored = Stored product other than a petroleum liquid
SV-26	30 TAC Chapter 115, Storage of VOCs	115TK-00060	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Carbon adsorption system Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.
SV-26	40 CFR Part 60, Subpart K	115TK-00057	Construction/Modification Date = On or before June 11, 1973 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less
SV-3	30 TAC Chapter 115, Storage	115TK-00051	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous

Unit ID	Regulation	Index Number	Basis of Determination*
	of VOCs		compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
SV-3	40 CFR Part 60, Subpart Ka	60Ka-00445	Product Stored = Stored product other than a petroleum liquid
SV-41	40 CFR Part 60, Subpart Ka	60Ka-00445	Product Stored = Stored product other than a petroleum liquid
SV-4A	30 TAC Chapter 115, Storage of VOCs	115TK-00057	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Carbon adsorption system
SV-4A	40 CFR Part 60, Subpart Ka	60Ka-00001	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less
SV-5	30 TAC Chapter 115, Storage of VOCs	115TK-00088	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons
SV-5	40 CFR Part 60, Subpart K	60K-00001	Construction/Modification Date = On or before June 11, 1973
SV-51	40 CFR Part 60, Subpart Kb	60Kb-00397	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
SV-56	30 TAC Chapter 115, Storage of VOCs	115TK-00050	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
SV-56	40 CFR Part 60, Subpart Kb	60Kb-00001	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)

Unit ID	Regulation	Index Number	Basis of Determination*
SV-58	30 TAC Chapter 115, Storage of VOCs	115TK-00050	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
SV-58	40 CFR Part 60, Subpart K	60K-00001	Construction/Modification Date = On or before June 11, 1973
SV-59	30 TAC Chapter 115, Storage of VOCs	115TK-00050	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
SV-59	40 CFR Part 60, Subpart K	60K-00001	Construction/Modification Date = On or before June 11, 1973
SV-7	40 CFR Part 60, Subpart K	60K-00001	Construction/Modification Date = On or before June 11, 1973
LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115NAC-LD00030	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115NAC-LD00015	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
GRPHTR	30 TAC Chapter 117, Subchapter B	117B-HTR00057	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 100 MMBtu/hr, but less than 200 MMBtu/hr. CO Monitoring System = Continuous emission monitoring system complying with 30 TAC § 117.8100(a)(1). NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average

Unit ID	Regulation	Index Number	Basis of Determination*
			NOx Reduction = Post combustion control method other than water or steam injection, ammonia injection, other reagent injection, forced or induced flue gas recirculation. Fuel Type #1 = Natural gas NOx Monitoring System = Continuous emissions monitoring system Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on a rolling 12-month average. NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
H-3	30 TAC Chapter 117, Subchapter B	117B-HTR00006	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr. CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS. NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average NOx Reduction = Post combustion control method other than water or steam injection, ammonia injection, other reagent injection, forced or induced flue gas recirculation. Fuel Type #1 = Natural gas NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
B-1	30 TAC Chapter 112, Sulfur Compounds	112-BOIL1	Fuel Type = Liquid fuel. Heat Input = Design heat input is less than or equal to 250 MMBtu/hr. Stack Height = The effective stack height is less than the standard effective stack height for each stack to which the unit routes emissions.
B-1	30 TAC Chapter 117, Subchapter B	117-BOIL1	Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is less than or equal to 2 MMBtu/hr.
B-1	40 CFR Part 60, Subpart Dc	60DC-BOIL1	Construction/Modification Date = After February 28, 2005. Maximum Design Heat Input Capacity = Maximum design heat input capacity is less than 10 MMBtu/hr (2.9 MW).
GRPHTR	40 CFR Part 60, Subpart D	60D-1	Construction/Modification Date = On or before August 17, 1971.
GRPHTR	40 CFR Part 60, Subpart Db	60Db-00001	Construction/Modification Date = On or before June 19, 1984.
GRPHTR	40 CFR Part 60, Subpart Dc	60Dc-00001	Construction/Modification Date = On or before June 9, 1989.

Unit ID	Regulation	Index Number	Basis of Determination*
H-3	40 CFR Part 60, Subpart Dc	60Dc-00001	Construction/Modification Date = On or before June 9, 1989.
FL-1	30 TAC Chapter 111, Visible Emissions	111-FLARE00004	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
FL-1	40 CFR Part 60, Subpart A	60A-FLARE00007	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
FL-1	40 CFR Part 60, Subpart A	60A-FLARE00008	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
FL-1	40 CFR Part 60, Subpart A	60A-FLARE00009	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm)
GRPTURB1	30 TAC Chapter 117, Subchapter B	117B-TUR00003	Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Megawatt Rating = MR is greater than or equal to 1 MW and less than 10 MW and unit is not an opt-in unit. CO Emission Limitation = Title 30 TAC § 117.310(c)(1). EGF System Cap Unit = The engine is not used as an electric generating facility to generate electricity for sale to the electric grid. Averaging Method = Complying with the applicable emission limits using a block one-hour average. CO Monitoring System = Monitoring other than CEMS, PEMS or steam/fuel or water/fuel ratio monitoring. NOx Reduction = Post combustion control method other than ammonia injection, injection of a chemical reagent other than ammonia, or water or steam injection. Service Type = Stationary gas turbine. NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11).

Unit ID	Regulation	Index Number	Basis of Determination*
			NOx Monitoring System = Maximum emission rate testing.
GRPTURB1	40 CFR Part 60, Subpart GG	60GG-00041	NOx Control Method = NO_x control method other than water or steam injection or selective catalytic reduction. Peak Load Heat Input = Heat Input is greater or equal to 10 MMBtu/hr (10.7 GJ/hr) and less than or equal to 100 MMBtu/hr (107.2 GJ/hr). Construction/Modification Date = On or after October 3, 1982 and before July 8, 2004. NOx Allowance = The owner or operator is not electing to use a NO_x allowance in determining emission limits in 40 CFR § 60.332(a). NOx Monitoring Method = No continuous monitoring system is used. Sulfur Content = Compliance is not demonstrated by determining the sulfur content of the fuel. Turbine Cycle = Unit does not recover heat from the gas turbine exhaust to preheat inlet combustion air; or to heat water or generate steam. Fuel Type Fired = Natural gas meeting the definition in § 60.331(u). Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation. Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage. Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.
GRPTURB2	30 TAC Chapter 117, Subchapter B	117B-TUR00002	Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Megawatt Rating = MR is less than 1 MW. CO Emission Limitation = Title 30 TAC § 117.310(c)(1). EGF System Cap Unit = The engine is not used as an electric generating facility to generate electricity for sale to the electric grid. Averaging Method = Complying with the applicable emission limits using a block one-hour average. CO Monitoring System = Monitoring other than CEMS, PEMS or steam/fuel or water/fuel ratio monitoring. NOx Reduction = No NO_x reduction. Service Type = Stationary gas turbine. NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11). NOx Monitoring System = Maximum emission rate testing.
GRPTURB2	40 CFR Part 60, Subpart GG	60GG-00005	Peak Load Heat Input = Heat Input is greater or equal to 10 MMBtu/hr (10.7 GJ/hr) and less than or equal to 100 MMBtu/hr (107.2 GJ/hr). Construction/Modification Date = On or before October 3, 1977.
PLANT-FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device. Compressor Seals = The fugitive unit contains compressor seals. Flanges = The fugitive unit contains flanges.

Unit ID	Regulation	Index Number	Basis of Determination*
			Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit has process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit has reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Compressor seals contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit. Complying with § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).
PLANT-FUG	40 CFR Part 60, Subpart KKK	60KKKALL	SOP/GOP Index No. = OWNER/OPERATOR ASSUMES FUGITIVE CONTROL REQUIREMENTS FOR ALL COMPONENTS IN VOC SERVICE SUBJECT TO NSPS KKK WITH NO ALTERNATE CONTROL OR CONTROL DEVICE Closed Vent Systems = Closed-vent systems addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Facility Type = Affected facility is the group of all equipment except compressors within a process unit. Heavy Liquid Service = Pump in heavy liquid service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Light Liquid Service = Pressure relief device in light liquid service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Open-Ended Valves or Lines = No open-ended valves or lines addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit.

Unit ID	Regulation	Index Number	Basis of Determination*
			Vacuum Service = No component in vacuum service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Vapor Recovery System = No vapor recovery system addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. AMEL = Not using alternate means of emission limitation. Complying with § 60.482-10 = Complying with 40 CFR 60.482-10. Construction/Modification Date = After January 20, 1984 and on or before August 23, 2011. Gas/Vapor Service = Valves in gas/vapor service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Non-VOC or Non-Wet Gas Service = Component in non-VOC or non-wet gas service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. AMEL = Not using alternate means of emission limitation. Complying with § 60.482-10 = Not complying with 40 CFR 60.482-10. Facility Covered by 40 CFR Part 60, Subparts VV or GGG = Facility not covered by NSPS Subpart VV or Subpart GGG or NESHAP Subpart V. Light Liquid Service = Pump in light liquid service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. AMEL = Not using alternate means of emission limitation. Complying with § 60.482-6 = Not complying with 40 CFR 60.482-6. Complying with § 60.482-8 = Complying with 40 CFR 60.482-8. Compressors = Compressor in VOC or Wet Gas Service. Enclosed Combustion Device = No enclosed combustion device addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Complying with § 60.482-7 = Complying with 40 CFR 60.482-7. Control Devices Used to Comply With AMEL = No control devices used to comply with AMEL. Flanges and Other Connectors = Flanges or other connectors addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Gas/Vapor Service = Pressure relief device in gas/vapor service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Heavy Liquid Service = No pressure relief device in heavy liquid service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. Reciprocating Compressor in Wet Gas Service = Reciprocating compressor not in wet gas service (or not reciprocating compressor). AMEL = Not using alternate means of emission limitation. Complying with § 60.482-10 = Not complying with 40 CFR 60.482-10. Complying with § 60.482-2 = Complying with 40 CFR 60.482-2. Light Liquid Service = Valves in light liquid service addressed in 40 CFR 60 (NSPS) Subpart KKK included in the fugitive unit. AMEL = Not using alternate means of emission limitation.

Unit ID	Regulation	Index Number	Basis of Determination*
			Flare = Flare control device addressed in 40 CFR 60 (NSPS) Subpart KKK. Complying with § 60.482-3 = Complying with 40 CFR 60.482-3. Complying with § 60.482-4 = Complying with 40 CFR 60.482-4. Complying with § 60.482-8 = Not complying with 40 CFR 60.482-8. Complying with § 60.482-8 = Complying with 40 CFR 60.482-8. Complying with § 60.482-7 = Complying with 40 CFR 60.482-7.
PLANT-FUG	40 CFR Part 60, Subpart VV	60VV-0001	Produces Chemicals = The fugitive unit is not part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.
GRP-CT	40 CFR Part 63, Subpart Q	63Q-CT00001	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
EDEAI	30 TAC Chapter 115, Vent Gas Controls	115-VENT033	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
EDEAI	30 TAC Chapter 115, Vent Gas Controls	115-VENT034	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
GRP-GLYVNT	30 TAC Chapter 115, Vent Gas Controls	115-VENT028	Alternate Control Requirement = Alternate control is not used. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-HTRVNT	30 TAC Chapter 115, Vent Gas Controls	115-VENT033	Alternate Control Requirement = Alternate control is not used. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
GRP-HTRVNT	30 TAC Chapter 115, Vent Gas Controls	115-VENT034	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
GRP-LUBEVT	30 TAC Chapter 115, Vent Gas Controls	115-VENT028	Alternate Control Requirement = Alternate control is not used. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
GRPTURB2	30 TAC Chapter 111, Visible Emissions	111-VENT00020	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
DEGREASE	30 TAC Chapter 115, Degreasing Processes	115-SOLV00010	Solvent Degreasing Machine Type = Remote reservoir cold solvent cleaning machine. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested. Solvent Sprayed = No solvent is sprayed. Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit. Solvent Heated = The solvent is not heated to a temperature greater than 120° F. Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.

Unit ID	Regulation	Index Number	Basis of Determination*
			Drainage Area = Area is less than 16 square inches. Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.
GRP-GLYVNT	40 CFR Part 63, Subpart HH	63HH-001	Alternate Means of Emission Limitation (AMEL) = The EPA Administrator has not approved an alternate means of emission limitation in accordance with 40 CFR § 63.777 or no alternate has been requested. HAP Source = Stationary of source of HAPs that is not a major source as defined in 40 CFR § 63.761. Affected Source Type = Triethylene glycol (TEG) dehydration unit not located within an UA plus offset and UC boundary. Area Source Exemption = Actual annual average flowrate of natural gas to the TEG unit is less than 85,000 standard cubic meters per day.

* - The “unit attributes” or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room,

located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site.

The status of air permits and applications can be found by performing the appropriate search of the databases found at the following website:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

New Source Review Authorization References

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 3956B	Issuance Date: 04/04/2017
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.181	Version No./Date: 11/01/2001
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.352	Version No./Date: 03/14/1997
Number: 106.352	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.492	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table” or “MAERT for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: B-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112-BOIL1
Pollutant: SO_2	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Sulfur Content of Fuel	
Minimum Frequency: Quarterly and within 24 hours of any fuel change	
Averaging Period: n/a	
Deviation Limit: Any monitoring data/records showing fuel containing more than 15 ppmw total sulfur shall be considered and reported as a deviation.	
Basis of monitoring: A common way to determine SO2 emissions is by determining the amount (percentage) of sulfur in fuel combusted by an emission unit. This quantity along with stack flow rate and quantity of fuel combusted may be used to calculate the amount of SO2 emitted to the atmosphere.	

Unit/Group/Process Information	
ID No.: EDEAI	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: 115-VENT034
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Non-availability of records	
Basis of monitoring: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 ºC and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.	

Unit/Group/Process Information	
ID No.: GRP-HTRVNT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: 115-VENT034
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Non-availability of records	
Basis of monitoring: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 ºC and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.	

Unit/Group/Process Information	
ID No.: GRPTURB1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG-00041
Pollutant: NO_X	Main Standard: § 60.332(a)(2)
Monitoring Information	
Indicator: NOx Concentration	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Maximum NOx concentration in the stack gas shall not exceed 42 ppmvd (parts per million by volume on a dry basis).	
Basis of monitoring: It is widely practiced and accepted to calibrate and use a portable analyzer or NOx CEMS/PEMS to measure NOx concentration with procedures such as EPA Test Method 7. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Additionally, measuring the NOx concentration is provided as a monitoring option for any control device because an increase in NOx concentration may be indicative of the control device performance. Outlet NOx concentration has been used as an indicator in many federal and state rules.	

Unit/Group/Process Information	
ID No.: GRPTURB2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT00020
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: The use of an alternate fuel (other than natural gas with less than 10 grains sulfur/ 100 scf) shall be considered a deviation.	
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only.	

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR permits that apply at the permit area covered by the FOP. This includes permits by rule. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). Also, TCEQ has developed a website based mechanism to electronically access public documents. TCEQ's Central File Room Online website (https://www.tceq.texas.gov/goto/cfr-online) should be used for all electronic document searches. Guidance documents that describe how to search electronic records archived in the Central File Room server are available at

https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

All current permits by rule are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceq.texas.gov/permitting/air/nav/air_pbr.html

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on **January 26, 2018**.
   Site rating: **19.09 / Satisfactory** Company rating: **10.90 / Satisfactory**

(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating?.....No

Site/Permit Area Compliance Status Review
1. Were there any out-of-compliance units listed on Form OP-ACPS?.....No
2. Is a compliance plan and schedule included in the permit? .....No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes

OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes